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Street, Minneapolis, MN 55410 (US). STEVENSON, Cheri, A. [US/US]; 81 Old Yankee Road, Haverhill, MA 01832 (US). WEY, Shiow-Jyi [—/US]; 5 Kimball Court, Apartment 611, Woburn, MA 01801 (US).

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(74) Agents: GRIEFF, Edward, D. et al.; The Willard Office Building, 1455 Pennsylvania Avenue, NW, Washington, DC 20004 (US).

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(71) Applicant (for all designated States except US): NITROMED, INC. [US/US]; 12 Oak Park Drive, Bedford, MA 01730 (US).

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(54) Title: CYCLOOXYGENASE-2 SELECTIVE INHIBITORS, COMPOSITIONS AND METHODS OF USE

(57) Abstract: The invention describes novel cyclooxygenase 2 (COX-2) selective inhibitors and novel compositions comprising at least one cyclooxygenase 2 (COX-2) selective inhibitor, and, optionally, at least one compound that donates, transfers or releases nitric oxide, stimulates endogenous synthesis of nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor or is a substrate for nitric oxide synthase, and/or at least one therapeutic agent. The invention also provides novel kits comprising at least one COX-2 selective inhibitor, optionally nitrosated and/or nitrosylated, and, optionally, at least one nitric oxide donor, and/or, optionally, at least one therapeutic agent. The novel cyclooxygenase 2 selective inhibitors of the invention can be optionally nitrosated and/or nitrosylated. The invention also provides methods for treating inflammation, pain and fever; for treating and/or improving the gastrointestinal properties of COX-2 selective inhibitors; for facilitating wound healing; for treating and/or preventing renal and/or respiratory toxicity; for treating and/or preventing other disorders resulting from elevated levels of cyclooxygenase-2; and for improving the cardiovascular profile of COX-2 selective inhibitors.